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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,210	10/19/2001	Paul Von Hase	212811US2PCT	8498

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT	PAPER NUMBER
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2677

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/926,210

Applicant(s)

HASE, PAUL VON

Examiner

Kimnhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on RCE and Amendment filed on 8/16/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37 and 38 is/are allowed.
- 6) ☒ Claim(s) 1-4, 16 and 19-24 is/are rejected.
- 7) ☒ Claim(s) 5-15, 17, 18 and 26-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This application has been examined. The claims 1-38 are pending. The examination results are as following.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/16/05 has been entered.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 16, 19-20, 25, 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Naka et al. (US 5,990,968).

Regarding claims 1, 19, Naka et al. discloses in figs. 2, 9, a method for correcting the phase difference between a pixel clock of a graphics card and a sampling clock of a flat-panel display with an analog interface in a system having a flat-panel display, a graphics card and a computer, comprising; determining an ideal phase (see MCU 9 control the phase adjustment, see

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abstract, col. 2, lines 63-67, see col. 5, lines 59-62) different between the pixel clock (see black white level, or picture element, see col. 8, lines 56-59) of the graphics card and the sampling clock (see sampling clock phase) of the flat panel display; and performing an automatic adjustment (see processing device 18 including MPU) of the ideal phase difference repeatedly during continued operation of the display to compensate for phase drift during the continued operation of the display by providing an updated ideal phase difference (see col. 10, lines 11-14).

Regarding claims 2, 20, Naka et al. discloses the automatic adjustment of the ideal phase difference is performed periodically (see col. 9, lines 18-23).

Regarding claims 4-5, 16, 25, 36, Naka et al. discloses further, wherein an ideal phase difference adjustment necessary for an instantaneous condition of the system during continued operation of the display is determined only at individual image spots (see col. 9, lines 2-5), and the determined ideal phase difference adjustment is then applied to the entire display as the display displays images (see figs. 3A-3E, see gradations levels reach to 100%, see col. 6, lines 49-52), and thus they could have an inherent a masking pixels and unchanged from the immediately preceding one.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naka et al. (US 5,990,968) in view of Hirao et al. (US 4,996,596).

Naka et al. discloses every feature of the claimed invention, however, Naka et al. does not disclose the adjusting device for shifting the phase comprising a circuit containing two PLL circuits, whose outputs can be adjusted independently of one another as regards their phase. Hirao discloses adjusting device for shifting the phase comprising a circuit containing two PLL circuits, whose outputs can be adjusted independently of one another as regards their phase (see a circuit for providing the phase comparator (16) to compare the phase of the horizontal synchronization signal from synchronization separating circuit (14), see column 8, lines 45-49), and two PLL loop (first PLL loop and second PLL loop, whose outputs independently to each other (see abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teaching of using the phase adjusting the phase comprising first PLL loop and second PLL loop as taught by Hirao into the adjusting device of Naka et al. having sampling clock because this would provide a plurality of lock ranges and supply with a horizontal synchronization signal separated in a synchronization separating circuit via a band-pass filter, and also response to a single output in a synchronization detector circuit (see abstract).

***Allowable Subject Matter***

6. Claims 37-38 are allowed.

7. Claims 5-15, 17-18, 26-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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8. The following is a statement of reasons for the indication of allowable subject matter:

The present invention is directed to a method for correcting the phase difference between a pixel clock of a graphics card and a sampling clock of a plat-panel display with an analog interface in a system having a flat-panel display, a graphics card and a computer, comprising determining an ideal phase difference between the pixel clock of the graphics card and the sampling clock of the flat panel. The combination of the closest prior art, West (WO 98/25401), Naka et al. (5,990,968) and Clark, III disclose a similar invention, however, they fail to teach the automatic adjustment of the ideal phase difference comprises selecting a sufficiently bright image spot and the rising edge of a video pulse of this image spot is determined, and the ideal phase difference is adjusted such that a sampling instant for an entire image is situated approximately at the midpoint between rising and falling edges of the video pulse as claims 5, 26, 37-38; or the adjusting circuit shifts the phase for determination of the rising edge sufficiently far toward a back-porch region that the measured amplitude value decreases to predetermined percentage, such as 50% of the previously determined amplitude value, whereupon this value of the phase is stored temporarily as the position of the rising or falling edge as claims 33-34; or the adjusting circuit uses an offset by which the sampling instant can be changed by the user compared with the value determined during matching, in which case said offset is used during automatic matching as claim 35.

### *Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is (571) 272-7698.

The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen  
October 27, 2005

AMR A. AWAD  
PRIMARY EXAMINER  
*Amr Awad*